



South Orange County Wastewater Authority

February 13, 2001

Ms. Lauren Fondahl
Biosolids Coordinator
Clean Water Act Compliance Office - EPA Region 9
75 Hawthorne Street
San Francisco, CA. 94105-3901

Subject: Biosolids Annual Reports - 2001

Dear Ms. Fondahl:

Per the requirements of 40 CFR Part 503, the South Orange County Wastewater Authority (SOCWA) is enclosing the required biosolids annual reports for 2001. The reports are for the SOCWA's own operated facilities and the facilities operated by its member agencies.

Only one facility, the Regional Treatment Plant, had some biosolids that were land applied, and therefore has a signed certification statement for pathogen and vector reduction requirements. The biosolids from all other facilities were either composted or sent to a sanitary landfill. Per your reporting instructions, SOCWA asks the EPA to refer to the land application information submitted by Synagro West Inc. for biosolids that was applied from our Regional Treatment Plant.

The biosolids annual reports were emailed to your office on February 13, 2002, as Excel files and are also enclosed herewith on a 3 ½" disk.

If you should have any further questions, or need additional information, please contact me.

Very truly yours,

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Tom Rosales
Director of Technical & Environmental Services

Enclosures

SOCWA Regional Treatment Plant

General Facility Information	
	Please type information into the cells below.
Permit No.	NPDES NO. CA0107611
Facility	SOCWA Regional Treatment Plant
Authority Name	South Orange County Wastewater Authority
Regional Board Number (California only)	9 - San Diego
Facility Physical Address	
Street	29201 La Paz Road
City	Laguna Niguel
County	Orange
State	CA
Zip Code	92656
Phone	949-234-5461
Facility Mailing Address	
Street	29201 La Paz Road
City	Laguna Niguel
State	CA
Zip Code	92656
Responsible Official	
Name	Tom Rosales
Title	Director of Technical & Environmental Svcs.
Biosolids Contact Person	
Name	Tom Rosales
Title	Director of Technical & Environmental Svcs.
E-mail	trosales@socwa.com
Phone	949-234-5419
Fax	949-489-0130
Average Influent Flow, in millions of gallons per day (MGD)	11.72
Annual biosolids production, in dry metric tons (DMT), 100% dry weight basis	3391
Does this facility have a design capacity equal to or greater than 1 million gallons per day (MGD)? (Y/N)	Y
Is Pretreatment Required? (Y/N)	Y
Does the facility reside on Indian Lands? (Y/N)	N
Is this a Class 1 facility? (Y/N)	N
Does the facility send biosolids out of state? (Y/N)	Y

Facility Location

Please give the location of this facility in either degrees, minutes, seconds OR decimal degrees.

Example of Latitude in degrees, minutes and seconds: 36 22 30.51 (please include all available significant decimals)

Example of Longitude in degrees, minutes and seconds: 109 07 30.32 (please include all available significant decimals)

	Degrees	Minutes	Seconds
Latitude in Degrees, Minutes and Seconds:	33N	32	37
Longitude in Degrees, Minutes and Seconds:	117W	42	33

Example of Latitude in Decimal Degrees: 36.37514167 (please include all available significant decimals)

Example of Longitude in Decimal Degrees: 109.1250889 (please include all available significant decimals)

Latitude in Decimal Degrees:	
Longitude in Decimal Degrees:	

Please select a code number from the table below that best describes at what place in this facility the latitude and longitude values were obtained. For example, if the latitude and longitude where measured in the center of the facility property, the code 020 would be used. Please type the code in the cell to the right.	Reference Point Code: 25
Reference Point Code Description	Reference Point Code Number
Administrative Building	019
Air Monitoring Station	029
Air Release Stack	006
Air Release Vent	007
Atmospheric Emissions Treatment Unit	012
Center of Facility	025
Facility Centroid	020
Intake Pipe	030
Lagoon or Settling Pond	010
Liquid Waste Treatment Unit	011
NE Corner of Land Parcel	021
NW Corner of Land Parcel	023
Other	003
Plant Entrance	002
Process Area Unit Centroid	018
Process Unit	017
SE Corner of Land Parcel	022
Solid Waste Storage Area	014
Solid Waste Treatment/Disp. Unit	013
Storage Tank	008
SW Corner of Land Parcel	024
Unknown	001
Water Monitoring Station	028
Water Release Pipe	009

Please select a code number from the table below that best describes how the latitude and longitude values were obtained. For example, if the measurement was taken from a topographic map, the code would be 018. Please type the appropriate code in the cell to the right.	Collection Method Code: 28
Collection Method Code Description	Collection Method Code Number
Address Matching	007

Classical Surveying Techniques	025
Global Positioning System (GPS)	028
Interpolation - Map	018
Interpolation - Photo	019
Public Land Survey - Quarter Section	023
Public Land Survey - Section	024
Unknown	027

<p>If you used Collection Method Codes 018 or 019, please enter the map scale of the map that was used. For example, if a US Geological Survey topographic map was used to find the location, and that map was created at a 1:24,000-scale, please enter 24000. (Note: map scale is a ratio that refers to the proportional distance on the ground for one unit of measure on a map or aerial photograph - e.g., 1 inch on the map equals 24,000 inches on the ground.) If the map scale is not known, please type UNKNOWN. Please enter the information in the cell to the right.</p>	Source Map Scale:

<p>Please enter the calendar date when the location data were collected, in mm/dd/yyyy format in the cell to the right (if the date is not known, please type UNKNOWN):</p>	Data Collection Date:
	2/7/2002

CONTRACT APPLIER(S)/HAULER(S)	
Please include all haulers and/or appliers used this year.	
	Please type information into this column.
Applier 1	
Name	Synagro West Inc.
Street	10490 Dawson Canyon Road
City	Corona
State	CA
County of Operations	Riverside
Zip Code	92883
Contact Name	Mark Grey
Contact Phone	909-277-2662 ext. 23
Contact Email (if available)	mgrey@synagro.com
Amount of Use: (Majority/Occasional)	Majority
Applier 2	
Name	Waste Markets
Street	P.O. Box 5102
City	Fullerton
State	CA
County of Operations	Orange
Zip Code	92838
Contact Name	David Long
Contact Phone	714-578-0422
Contact Email (if available)	
Amount of Use: (Majority/Occasional)	Occasional
Applier 3	
Name	
Street	
City	
State	
County of Operations	
Zip Code	
Contact Name	
Contact Phone	
Contact Email (if available)	
Amount of Use: (Majority/Occasional)	

BIOSOLIDS TREATMENT PROVIDED	
<p>This sheet refers to post-wastewater treatment processes only. For each treatment type, please indicate which method(s) your facility uses to treat its biosolids. For example, if three settling ponds are used for thickening, enter the code for gravity followed by the number three in parentheses. The number entered will look like 1(3). If more than one method is used for each process, please separate the codes with commas. For example, if three settling ponds and five centrifuges are being used, enter 1(3), 3(5). If a process is not being used (for example, your facility doesn't employ a process for thickening), please enter the code 999.</p>	
	Type the thickening code(s) into the box below:
THICKENING	999
Codes to use for thickening:	
1. Gravity	
2. Dissolved-Air Flotation (DAF)	
3. Centrifuge (enter number of centrifuges in use)	
4. Other (briefly describe in the cell to the right of the "Thickening" code box)	
	Type the stabilization code(s) into the box below:
STABILIZATION	6
Codes to use for stabilization:	
5. Aerobic Digestion	
6. Anaerobic Digestion	
7. Heat Transfer	
8. Wet Oxidation	
9. Chemical (Lime) Stabilization	
10. Composting	
11. Biosolids Lagoons	
12. Other (briefly describe in the cell to the right of the "Stabilization" code box)	
	Type the stabilization code(s) into the box below:
CONDITIONING	999
Codes to use for conditioning:	
13. Chemical Conditioning	
14. Other (briefly describe in the cell to the right of the "Conditioning" code box)	
	Type dewatering code(s) into the box below:
DEWATERING	21 (4)
Codes to use for dewatering:	
15. Vacuum Filter	
16. Pressure Filter	
17. Belt Filter	
18. Drying Bed	
19. Drying Lagoon	
20. Heat Drying	
21. Centrifuge	
22. Other (briefly describe in the cell to the right of the "Dewatering" code box)	
	Type other applicable code(s) into the box below:
OTHER	999
Codes to use for "other":	
23. Wastewater Lagoon	
24. Mixing of Biosolids	
25. Oxidation Ditch	
26. Incineration	
27. Septage	
28. Other (briefly describe in the cell to the right of the "Other" code box)	

Final Use and Disposal Practices

Total Annual Production	Please type amount in the cell below. Weight units must be Dry Metric Tons (DMT), 100% dry weight basis.
	3391

Land application represents the dry metric tons of biosolids used/disposed by land application, which includes spraying, spreading, or injection of biosolids onto or beneath the land surface. Biosolids can be applied in two basic forms: Bulk Biosolids or Derived Material.

Land Application of Class B biosolids:	
	Please type amounts in the cells below, to the right of each applicable method. Weight units must be Dry Metric Tons (DMT).
Agricultural Land	1736
Range Land	
Forest	
Public Contact Site	
Reclamation Site	
Land Application of Class A biosolids:	
Agricultural Land	
Range Land	
Forest	
Public Contact Site	
Reclamation Site	
Sold or Given Away	
Lawn or Garden	

SURFACE DISPOSAL: (monofill or dedicated land disposal site)	
	Please type amounts in the cells below, to the right of each applicable method. Weight units must be Dry Metric Tons (DMT).
With Liner & LCS	
Without Liner & LCS	

LANDFILL	
	Please type amounts in the cells below, to the right of each applicable method. Weight units must be Dry Metric Tons (DMT).
Landfill Disposal	1286
Landfill Cover (ADC or final)	Final
Landfill Name	(2) Prima Deshecha & South Yuma County
Does Landfill meet 40CFR258? (Y/N)	Y

RECEIVED FROM ANOTHER FACILITY	
	Please type amounts in the cells below, to the right of each applicable method. Weight units must be Dry Metric Tons (DMT).
Amount Received From Another Facility	
Name of the other facility	
Address of the other facility	

TRANSFERRED TO ANOTHER FACILITY	
	Please type amounts in the cells below, to the right of each applicable method. Weight units must be Dry Metric Tons (DMT).
Amount Transferred To Another Facility	369
Name of the other facility	Synagro West Inc.
Address of the other facility	10490 Dawson Canyon Road

LAND APPLICATION SITE INFORMATION

If your facility or a contractor applies biosolids to the land, please enter the requested information in this sheet. Please copy this sheet and fill it in for each individual field.

Please type information in the cells below. SEE ATTACHMENTS

Site Name	
Site Number (Field Identification Number)	
Hydrologic Unit (if known)	
Owner	
Grower	
Applier	
Latitude	
Longitude	
Street Address (if applicable)	
Township	
Range	
Section	
Overall size of the field	
Applied area of the field	
Crop	
Maximum Rate (MT/Ha)	
Cumulative Load Required? (Y/N)	
Notification Required? (Y/N)	

Please enter either English or Metric Units for the items below.	English Units		Metric Units	
	Value	Unit	Value	Unit
Application Rate		tons/acre		MT/Ha
Recommended N for Crop		lbs/acre		Kg/Ha
Plant Available N (PAN)		lbs/dry ton		Kg/metric ton
Total Biosolids Applied		dry tons		dry metric tons
Actual Application Rate		dry tons/acre		dry metric tons/Ha
Target Application Rate		dry tons/acre		dry metric tons/Ha
Total Recommended N		lbs/acre		Kg/Ha
Total Applied N		lbs/field		Kg/field
Percent of Recommended N		%		%
P Applied		lbs/field		Kg/field
K Applied		lbs/field		Kg/field

Dates of Operation	Start Date	Finish Date
Dates of Application		
Dates of Seeding		
Dates of Harvesting		

Cumulative Metal Loadings (Kg/Ha):	Enter the Baseline values in the cells below	Enter the year in the cell below, then fill in the column	Enter the year in the cell below, then fill in the column	Enter the year in the cell below, then fill in the column	Enter the year in the cell below, then fill in the column	Enter the year in the cell below, then fill in the column
As maximum						
Cd average						
Cd maximum						
Cu average						
Cu maximum						
Pb average						
Pb maximum						
Hg average						
Hg maximum						
Mo average						
Mo maximum						
Ni average						
Ni maximum						
Se average						
Se maximum						
Zn average						
Zn maximum						

Land Location

Please give the location of this field in either degrees, minutes, seconds OR decimal degrees.

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	Degrees
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Longitude in Decimal Degrees:	

SEE ATTACHMENTS

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Reference Point Code Description	Reference Point Code Number
NE Corner of Land Parcel	021
NW Corner of Land Parcel	023
SE Corner of Land Parcel	022
SW Corner of Land Parcel	024
Other	003
Unknown	001

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MONITORING DATA SUMMARY

Final Use/Disposal Practice	Please enter information into this column.
How many biosolids analyses is this facility required to perform per monitoring year? (Please refer to the "Required Monitoring Frequency" table at right)	6
Did this facility use the sampling methods described in the table to the right? (Y/N)	Y
Are reported results represented on a 100% dry weight basis? (Y/N)	Y
If biosolids were land applied, were all the following metals sampled: As, Cd, Cu, Pb, Hg, Mo, Ni, Se, Zn? (Y/N/NA)	Y
If biosolids were surface disposed, were all the following metals sampled: As, Cr, and Ni? (Y/N/NA)	NA

Required Monitoring Frequency (Source: 40 CFR, Part 503)

Biosolids Production (DMT/yr)	Required Monitoring Frequency
>0 to <290	Once per year (1/yr)
290 to <1500	Once per quarter (4/yr)
1500 to <15,000	Once per 60 days (6/yr)
greater than or equal to 15,000	Once per month (12/yr)

Pollutants: Please enter data in the cells to the right of each sampled pollutant type. Please use the indicated units for each pollutant type, in dry weight only. Report on 100% dry weight basis.	Units	Yearly Average	Yearly Maximum	Analyses per Year	Comments / Methods Used
Arsenic (As)	mg/Kg	4.26	5.13	6	
Cadmium (Cd)	mg/Kg	5.46	8.33	6	
Chromium (Cr)	mg/Kg	23.7	28.7	6	
Copper (Cu)	mg/Kg	382	415	6	
Lead (Pb)	mg/Kg	23.5	31.2	6	
Mercury (Hg)	mg/Kg	1.9	1.98	6	
Molybdenum (Mo)	mg/Kg	8.36	11.6	6	
Nickel (Ni)	mg/Kg	27.3	31.5	6	
Selenium (Se)	mg/Kg	8.96	12	6	
Zinc (Zn)	mg/Kg	657	717	6	
Fecal Coliform	MPN/g				
Salmonella	MPN/4g				
Helminth OVA	#/4g				
Enteric Virus	PFU/4g				
Nitrite & Nitrate (NO2 & NO3)	%				
TKN	%				
Ammonia (NH3)	%				
Total Solids	%				
Phosphorus (P)	%				

Please enter data in the cells below.

If biosolids were disposed of in a municipal solid waste landfill, please indicate whether the biosolids passed a Paint Filter Test (enter Pass, Fail, or NA)	NA
If biosolids were disposed of in a municipal solid waste landfill, and a toxicity characteristic leaching procedure (TCLP) was done, please indicate whether the biosolids passed (enter Pass, Fail, or NA)	Pass

STLC methodology was utilized by Sierra Analytical

Pathogen and Vector Attraction Reduction (VAR)

Please note: this page of the spreadsheet must be printed out, signed at the bottom by the responsible official, and mailed to the EPA, as well as being returned with the rest of this spreadsheet (as an electronic file).

Pathogen Reduction for Class A Biosolids	If this facility produces Class A biosolids, please enter the appropriate compliance code number in the box below:
Code numbers to use for Pathogen Reduction of Class A Biosolids:	Code Description
1	Time/Temperature (T&T)
2	Alkaline Treatment (pH and T&T)
3	Prior Testing (EV and VHO)
4	No Prior Testing (EV and VHO)
5-1	PFRP Method: Composting
5-2	PFRP Method: Heat drying
5-3	PFRP Method: Heat treatment
5-4	PFRP Method: Aerobic digestion
5-5	PFRP Method: Beta ray irradiation
5-6	PFRP Method: Gamma ray irradiation
5-7	PFRP Method: Pasteurization
6	Equivalent PFRP

Pathogen Reduction for Class B Biosolids	If this facility produces Class B biosolids, please enter the appropriate compliance code in the box below:
	Code 2-3 (PSRP Method: anaerobic digestion)
Code numbers to use for Pathogen Reduction of Class B Biosolids:	Code Description
1	Prior Testing for Fecal Coliform
2-1	PSRP Method: aerobic digestion
2-2	PSRP Method: air drying
2-3	PSRP Method: anaerobic digestion
2-4	PSRP Method: composting
2-5	PSRP Method: lime stabilization
3	Equivalent PSRP

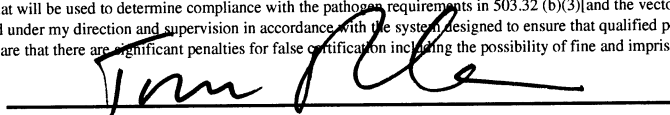
Vector Attraction Reduction (VAR)	Please enter the appropriate VAR compliance code in the box below:
	Code 1 (38% Volatile Solids Reduction)
Codes to use for VAR compliance:	Code Description
1	38% Volatile Solids Reduction
2	BENCH - Anaerobic Digestion
3	BENCH - Aerobic Digestion
4	Aerobic Digestion (SOUR)
5	Aerobic Process (14 Day GT40)
6	Alkaline Stabilization (PH1222HR)
7	Drying (%TSGT75)
8	Drying (%TSGT90)
9	Injection
10	Incorporation
11	Surface Disposal Daily Cover
12	Domestic Septage Treatment
999	Not Applicable

Preparer's Certification Statement for Pathogen and Vector Attraction Reduction
40 CFR 503.17, as amended August 4, 1999

Please enter the compliance method number(s) in the statement below:

"I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in 503.32 (b)(3) [and the vector attraction reduction requirements in 503.33 (b)(1)]* was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Signature of responsible official:



*when vector attraction reduction is achieved during treatment